Index

ability and SES composition of schools 160
ability grouping
  in classrooms, USA 249, 250
  in comprehensive schools, abolition 182
  languages or Math 135
  Sweden in Math 168, 172
  teaching in Math 172
ability (SchoolABL) 33, 36, 38
ability tracking effects 18
  on educational inequality 38
  in the Netherlands
    ‘Dutch longitudinal study’ 38
ability tracking model 25–40, 27–32, 31, 33
Abitur, completion of 101
academic achievement
  average predicted probabilities 227
academic grouping of students, France 288
academic-oriented tracks, results 17
academic or more prestigious subjects, flexible curricula
  England, Ireland, Scotland, United States 382
academic pathways, entry to (A-levels) 224
academic performance in primary school 9
academic success
  course taking in secondary school 265
academic track 394
  choice fostering, Russia 328–9
  Hungary 133
  main route to university 12–13
  prestigious and academically demanding 381
academic upper secondary education, Sweden 166
access restrictions enforcement
  Italian educational system 319
achievement growth among countries 28, 35, 47
Advanced Highers, Scotland 234
advantaged backgrounds
  ‘highly valued’ subjects for labour market 217
age at entry into elementary school 26
age, gender, and ethnic origin 171
A-level
  choice, probabilities 226
  influences in entering 224
allocation into different tracks 136–41, 350
analysis of OECD and EU countries
  except, Chile, Mexico, Israel 69
apprenticeship/vocational tracks 133, 143, 144
Arab(s)
  and Mizrahim, Jewish ethnic group 362
  -Israeli vocationalization of education 373
  overrepresentation in engineering and vocational tracks, Israel 367
school sector, school SES 369
Ashkenazim
  Jewish ethnic group of European and American ancestry 362–3
attainment, institutionalized sorting 30
Australia and United States
  larger share of private schools 381
Australian states
  variety of educational systems 271
Australian Tertiary Admission Rank (ATAR) 271
autonomy of schools and teachers 27
average marginal effects
academic upper secondary education 176
average marginal effects from logistic regressions of different ability groups in Math 173
average partial effect (APE) 295
effect of parental education 296
from logistic regression models for diploma, France 294
Italy 310
baccalaureate schools (BS) 113, 122
baccalauréat, France 297
scientific, social sciences, arts, technological, vocational 289
basic education
primary and lower secondary, Estonia 344
bilingual classes, Hungary 134
‘Bologna process’ 308
higher education systems,
harmonization, EU 305
books in household, number
home literacy environment 50–51
boys’ preference for mathematics and hard sciences 367
British Cohort Study (BCS70)
private school for university qualification 228
Business studies, Technology, Arts, Social Sciences 238
Catholic schools
in Australia, modest fees 270
in Scotland 234
Central-Eastern European countries,
Hungary 130
certification as qualification
A-levels, BTEC Nationals, OCR Nationals 217
changes in schools’ social segregation 73
Children of Immigrants Longitudinal Study
in Four European Countries
(CILS4EU) 168
children of immigrants, educational preferences 367
children’s reading achievement
findings sensitive to parent’s social background 47
choice of German in lower secondary education, France 292
choice prediction of Latin or Ancient Greek
in lower secondary education, France 293
choices, influences of, social background, gender 217
church-funded religious schools,
increase, Hungary 131
higher success rates of students 133
City Technology College (CTC) schools 214, 220
classes, higher or lower ability grouping
British and American schools 15
Classes préparatoires aux grandes écoles 290
enrolment, weaker for females 300
classical education in secondary schools 4
classification of various forms of differentiation
in secondary education 11
class of origin and subject choice
core and other subjects 240
class-specific risk aversion 14
cognitive abilities
children 36
dead end of elementary school 32
high levels, positive effect for VET+ 122
positive effects 28, 34–5, 37–9
SchoolABL 33
cognitive competencies, importance of 45
at different ages 53–5
related social inequalities 45–59
college-focused curriculum 254
common-research strategy
of country-specific chapters 379
Community school, England 220
company-based vocational training
migration background of youths,
difficulties 115
‘compensatory advantage’ mechanism
(England and Italy) 385
competence level 97
effect on education level 104
competencies development
relative position of countries 52–3
completion of a general upper secondary education 202
comprehensive education 2000–04, PISA tests 185
Australia 270
eight years, Italy 307
Finland 182
Scandinavian models 4
United Kingdom 213
United States 250
comprehensive schooling 4–5
inequalities 269
compulsory schooling until 16, Scotland 234–5
compulsory subjects, final exams in Ireland
Math, English and Irish 246
consequences of differentiation in secondary education 397–8
contemporary secondary education systems
differentiation in 381
contemporary societies 3–19
control for parental education, ethnic difference 190
controls for language, cognitive test scores 175
control variables
sex, migrant status, school location 273
‘core’ subjects for higher-class students, Scotland 239
countries with ‘comprehensive system’ educational options, new 380
country of birth 51
country-specific educational characteristics 46
country-specific views on role of schooling 380
country studies 17
Europe, United States, Australia, Israel 19
course differentiation, 1994 253–4
Sweden 167
CPGE see Classes préparatoires aux grandes écoles
credential, importance of for labour market success in Finland 184
credentials’ role as mediators of socio-economic inheritance 184
cross-national studies 48
curricula, quality of 18
curricular differentiation, effects of 228, 233, 251
status distinction among courses 251
Danish Agency for International Education 199
Danish compulsory upper secondary education organization 198–201
data and methodology, the Netherlands 156
data and methods 48–52
data and variables, Statistics Denmark 202–3
datasets 135–6
demographic and family controls 220
demographic variables
gender and registered language 186
dependent variables 67
determinants of four 365
engineering track 365
logistic regression models 186
students’ achievement after GCSE examination 219
technological track 365
vocational track 365
descriptive results, Finland 186–8
descriptive statistics, overview of data, Sweden 169
difference-in-difference approach 66
differences by sex 203
difference shrinkage between countries of secondary schooling 398
differentiating power of parental education, Estonia 356
differentiation, external and informal education 61
educational tracks 26–7
external (between schools) 132
four forms in Hungary, school systems 132
internal (within schools) 132
school choice in Hungary 133–4
differentiation in secondary education 9, 37, 377
effect on educational attainment, Israel 361
Europe, United States, Australia, Israel 19
formal and ‘hidden’ 62–3
 hierarchical, Estonia 345
 social inequalities in educational opportunities, Russia 338–9
dimensions and special properties of educational systems 28
downward mobility 86
 common in Italy 317
 more frequent than upward mobility 383
 risk set 83
dropout
 from secondary education 352–3
 impact of social background on 346
 risk analysis, Italy 312
 status 365, 371
dummy variables, four 220
Dutch educational system 149–51
 extensive ability selection 160
 high achievement orientation 149
 standardized and centralized 387
Dutch school tracks
 to integrate secondary education, with vocational training 387
Dutch secondary education, four tracks 150
Dutch system, multiple track system 387
early ability 156
 for allocation to tracks, the Netherlands 390
eyear education differentiation, France
 long-term outcomes 287–302
eyear school leavers, effects 280
eyear tracking 143
 Germany, Hungary, the Netherlands,
 Switzerland 19, 386–90
 increase in educational inequality 65–6
 no visible effects 142–3
East Asian pupils
 and math test scores, no increase between primary and secondary 47
education
 1990s, non-public sector 131
 groups, five 220
 in Finland 181–3
 levels, highest between parents 220
 non-obligatory, vocationally oriented 165
 provider, change in Hungary
 Education Act 1984 168
 education, compulsory, Russia
 basic general education, five years, Russia 324
 primary education, four years 324
 Education Reform Act 1988, England 214
 educational achievement (attainment)
 170, 197, 252
 association with parental education 281
 of children, dependence on 94
 final 158–60
 inequality in, through curricular differentiation in secondary school USA 249–65
 levels 278–9
 lower in differentiated systems 35
 measurement (2000) 254
 secondary education, standard approach 25–6
 social origin 269
 educational attendance in Israel
 compulsory until age 14 362
 educational careers
 from graduation to higher education,
 Estonia 347
 parental education importance,
 Switzerland 275, 388–9
 ‘educational differentiation’ 3, 5, 7, 378
 educational inequalities 16–18
 based on social and ethnic origin 25
 by sex and social origin, Denmark 206–7
 in Danish upper secondary education
 197–208
 in England 213
 Europe, United States, Australia, Israel 19
 increase in opportunities and attainment 8
 on educational pathway 190–92
 educational level of parents,
 measurements 347–8
 educational mobility 14–16
 in German tracking systems 93–107
 social origin and school performance 383–4
educational opportunities
inequality of 3–19, 17, 228
in Hungarian system 389
in Switzerland 111
educational outcomes, decisive role
social origin, Italy 317
educational paths, non-standard
standard educational careers 14
educational stratification in Russia
distinct school types 323
formal structure 324–6
educational tracking, different types of
education 5
educational transitions, descriptive
statistics of
by highest parental education 187
educational transitions, for four birth
cohorts 348
eduLIFE study 395
effectively maintained inequality (EMI)
13, 213, 237, 357, 382
effects of educational systems
sorting and school effects 32
effects, short- and long-term 142–4
elementary school
achievement 33
school exit test score
mathematics and reading 151–2
to tracked secondary school, the
Netherlands 150
emotional support, advantaged families
16
empirical results 37–8
ending of ‘formal tracking’, England 214
English Baccalaureate (EBacc) 216
English comprehensive, introduction
1965 to 2002 214
Longitudinal Study of Young People in
England 214
major decision 221
English education system
vocational qualifications, for ages 16–18, 2000s 215
enrolment in prestigious schools
Australia and Russia 382
enrolment in the academic track
Continental Southern, Northern
European 382
entrance examination system, Finland
193
equality
high level at lower levels of education
184
of opportunity 61–75, 71
in education
aim of Denmark 198
conditions 201
influence of tracking systems 96
in German tracking systems 93–107
Estonia
educational inequalities in secondary
education 343–58
education policy 343
education system 344–6
Estonian Institute for Population Studies
346
Estonian Social Survey (ESS)
Estonian Statistical Office 346
ethnic and gender composition of tracks
Estonia 344
ethnic differences in track placement,
Israel 363
ethnicity
demographic variables 171
grouping, illegality of 135
European school systems, upper class
children 3
European Socio-economic Classification
(ESeC)
social class of origin 238
European Union 380
examinations, Standard Grades, Scotland
234
external and internal differentiation 11
external differentiation, types of schools
31
families
demand for education in different
countries 380
disadvantaged, students from 64
background decreasing influence 72
and dropout, Italy 312
impact on test scores, Hungary 129
Federal Law on Education (2012) 324
academically oriented lyceums 326
female students
advantageous enrolment, well-
educated parents 177
Finland
exam marks published by school 391
matriculation examinations’ results published 391
upper secondary education, entry into tertiary education 181–94
Finnish educational system major reforms 181
most equal among western countries 193
Folkeskole in Denmark, public municipal schools 199
Förderstufen 96–7
foreign language training 134
formal and informal differentiations 11, 65
separating students by ability 63
shift from, Sweden 167
formal external differentiation
definitions 11
placement of specific subjects 11
three main streams 394
formal stratification and early tracking 397
formal tracking
at ages 15–16, Sweden 166, 173–7
in compulsory education 165
in French schools 288
in Russian education 323
Foundation school, England 220
four-year college degree, probability 262
French educational system 287
track changes, little allowance 297
French school system 300–301
primary and secondary education 287
funding of Australian schools 270
Further Education (FE) Colleges vocational studies 234
gender
composition 221
controls, Hungary 138
difference
Estonia 350
in educational achievement 193
in favour of women, then men, Finland 188
in higher education, female students chances 300
Russia 331
Scotland and Ireland 239
effects, France 297
and migration variables 51, 295
General Certificate of Secondary Education (GCSE) 213
results 219
general qualifications, for tertiary education 201
general secondary education
main track to higher education, Estonia 355
general upper secondary education 200, 204–6
general versus vocational qualification 188
German as first foreign language increase for scientific baccalauréat 293
German, classical languages ability grouping in schools 301
German educational system, federalist 80
German Länder 35
German, Latin, Ancient Greek study, France
higher-educated parents 291
Germany
social inequalities in secondary education 79
and Switzerland
federalist organization in secondary education 386–7
‘gifted’ children, greater opportunities 104
girls, overrepresentation of high academic requirements 114
government schools in Australia free, secular education 270
grade point average (GPA)
Danish, Finland, Sweden 198
US high school 255
Grade(s) and parental education for track allocation 114
information, Denmark 202
retention, sanction for disruptive behaviour 319
sum, Sweden 167
‘grammar’ schools for all abilities, UK 213
Gymnasium, Germany 4, 387–8
heterogeneity, strong within-country
Australia, Germany, US 381
hidden racking in Swedish compulsory education 391–2
higher education, aspirations towards 336
by type of baccalauréat 299
higher education entry 238
   technological institute (Instituts universitaires de technologie, IUT) 290
   university, Classes préparatoire aux grandes écoles (CPGE) 290
higher education (HE) 233
   institutes for vocational route 380
   institution choice, children from advantaged families 337
   Russia, ‘social norm’ 329
   Scotland and Ireland 236–7
higher salariat class 241
   Scotland and Ireland 243
   high level technical track 394
   ‘high performers’ proficiency levels 67
   high school achievement, course-taking patterns 262
HLM analysis of social gradients in tracking systems 102, 103
home teaching, Denmark 199
   humanities
      choice by better performing schools 228
      and language subjects, optional 219
      versus vocational 221
Hungarian Central Statistical Office 129
Hungarian Life Course Survey (HLCS) reading and mathematical literacy tests 135–6
Hungary
   inequality of opportunity 144–5
   major inequalities in 129
   pre-2011 period 130–31
   school system, main mechanisms for differentiation 132–5
   secondary education, decentralized at level of schools 387
   system, decentralized 389
   unequal education system in OECD 129
independent schools
   Australia 270
   UK 214
independent variables
   country dummies, youth’s social background 50
   measuring socio-economic background 67–8
   relevant variables 219
   indicators for pre-tracking ability, Sweden 170
individual choice model
   Australia, England, Ireland, Scotland, United States 19, 392
   subject choice in lower and upper secondary education 392
individual cognitive abilities (ABL)
   general conditions for achievement 36
   influence of early ability 160
   influence of family 28
   influence on upper secondary education, France 295
informal competition between primary schools 132
informal differentiation, socio-economic segregation 63
informal external and internal differentiation
   ability grouping of students 12
   pupil–teacher ratio example 11–12
informal tracking in lower secondary education 299
   parental education, France 291
informal track mobility predicting among academic track ‘stayers’ 334
information for independent variables
   gender, migration background, parents’ education 290
information on data and case numbers 50
institutional differentiation
   and fields of study at tertiary and upper secondary level 213
   institutionalized sorting, primary secondary, tertiary effects 30
Instituts universitaires de technologie (IUT) 290, 298, 299, 300
integration of adolescents, questionnaire 168–70
interaction between parental education and lower secondary education, Italy 311
interactions with teachers, advantaged families 16
intergenerational mobility, Hungary 129
internal differentiation, US
ability grouping, tracking, streaming
inequality in educational attainment
internal tracking system, downward mobility 99
International Standard Classification of Education 273
international surveys, PIRLS, TIMSS, PISA, PIAAC 48
inter-track mobility, Israel 369
intra-generational inequalities, Hungary 129
INVASLIL test score distributions 318
Ireland 235–6
Irish Leaving Certificate 238
Irish School Leaver Surveys 237–8
Irish study requirement, Ireland 235
Israel
control variables inspection 369
educational system 361–4
Ministry of Education formal recognition of two school sectors, Jewish and Arab 394
secondary education
tracking and attainment 361–74
Italian educational system 306–8
Italian National Statistical Institute (ISTAT) 309
joint learning, superior in equity 5
Junior Certificate, Ireland 235
KHB composition analysis, parental education 311–12
Khrushchev period in Estonia, 1960s higher education enrolment share 344
kindergarten, preschool attendance, time required 26
labour market
organizations, Denmark 200–201
participation, Italy
tertiary education access 309
lack of a second chance
in Hungarian public education 142
language options, German or Latin,
France 288
languages, physics, chemistry, Ireland 243
Latin or Ancient Greek, effect on all diplomas 293
Law on Public Education, Hungary 131
learning environment types 14
learning outcomes varying across curricular tracks 252
Leaving Certificate, Ireland
English, mathematics and Irish 393
exam for higher education 235
six to eight subjects, English and Math 235
‘liberalization’ of education system,
Estonia 353
liberal perspective on ‘school choice’ 380
LifE study panel study 97–8
linear probability model
‘college-focused’ curriculum 258, 259
high school graduation 260–61
of ‘any advanced courses taken’ 257, 258
linear regression(s)
estimates
PISA score, parental education 276
of tests and grades at around age 15 174
tests scores
in Italian and mathematics 316
literacy of youth across countries 57
Local Education Authorities (LEAs) 214
logistic regression model
predicting dropout from secondary education 352
predicting non-completion of upper secondary education 204, 205
predicting upgrading in upper secondary education 207
logistic regression models (multinomial)
social origin, birth cohort, gender 349
logistic regression of probability of attaining Abitur 104–5
Longitudinal Study of Young People in England (LSYPE) 219
Longitudinal Surveys of Australian Youth 2003 (LSAY03) 269
empirical analysis data 272
long-term baccalaureate school 112
Index

409

low-ability classes 17
reinforcement of background differentials 17
lower level vocational track 394
lower secondary education Italy decline, no further education, Italy 312
scuola media unica 306
lower secondary track allocation, Switzerland 117–18
lower social backgrounds, vocational careers 289
‘low performers’, proficiency levels 67
low-performing children in lyceums large in Italy 317
Lycée in France 4
Maghreb origins, students with social selection 295
mandatory subjects of matriculation exams
English, mathematics, bible or religion studies for non-Jews 366
literature history, citizenship, language 366
marginal track differences in outcomes 144
math
ability grouping by parental education 172
classes
background differences, on different levels 177
more children of parents with tertiary education 177–8
competencies, countries involved, nine 48
and English 99
exit test score, no SES effect 153
grade achievement probabilities, England 225
grades, high, positive effect for VET+ 122
in Italy, upper secondary education 315–16
and language grades for track placement 114
literacy 56–57
z scores for 51
performance and academic pathways 223–7
performance of students 69–71
subject-specific ability grouping 165
matriculation
diploma eligibility 371
diploma, Israel
admission to higher education 362
examinations, Finland 182
examinations, Israel 362, 364
Files, Israel
on detailed outcomes of matriculation examinations 365
rates higher in vocational-technological tracks 373
means and percentages of variables by track and for that total sample 366
measure of school performance
average of teacher-given grades 185
mediating role of prior academic performance,
Scotland OLS regressions 242
medicine and law choices, higher social background
in Britain independent of ability 216
Meizav Files, Israel 364
Middenschool, the Netherlands 150
migrants, percentage in school 18
migrant status 273
independent effect 274
migration background 62
effects, France 297
tracks with low academic requirements 114
‘mixed tracking’ countries
central examinations at end of upper secondary education 394
mixed tracking model
Estonia, France, Israel, Italy, Russia 393–5
Estonia, France, Italy, Russia 19
mobility
across tracks, upper secondary education 313
between secondary school tracks 85
between tracks, US 252
in upper secondary education upgrading from vocational to technological baccalauréat 290
Model of Ability Tracking (MoAbiT) 27–8, 29, 37–8
influences 32
theoretical expectations 26
National Education Longitudinal Study (NELS) 1988 253
models of higher education entry
national learning assessment (INVALSI, 2013–14) 310
any entry, type, and route taken 191
National Pupil Database (NPD)
models of upper secondary qualification
state-financed schools 219
type of qualifications 189
National School Assessment Programme (INVALSI-SMV) 309
model, three-level
native language testing (Arabic or Hebrew)
countries, schools, students 154
English, mathematics, science 364
multilevel OLS regression
negative and positive associations, Australia 280
educational attainment as dependent variable 158–9
multinomial logistic regression models
neighbourhood conditions 62
predicting transition to different types of secondary education 351
multinomial logistic regressions 220
tertiary education 124, 125–6
multinomial logit models 255
lower secondary education 118
for college attendance by parental education 263, 264
multinomial logit regression
effects of family background, US 259
multinomial regression estimating
multinomial logistic regression relative risk ratios, university track or
effects of family background, US 259
VET track, general track 277
multinomial regression models
multinomial logit regression
for tertiary education 124, 125–6
multinomial regression estimating
lower secondary education 118
relative risk ratios, university track or
odds ratio (OR) 310
VET track, general track 277
upper secondary education 120–21
multinomial regression models
multivariate analysis on track mobility
for tertiary education 124, 125–6
multivariate results 188–90
87
tracking systems, internal or external 102
National Assessment of Basic Competencies (NABC)
National Authority for Measurement and Evaluation
annual 135
tests for 5th-grade pupils 364
dataset panel structure 142
National Child Development Study (NCDS) 215, 217
extent of within-school differentiation 138
national curriculum, teaching
family background and test scores 138
standardization 215
National Authority for Measurement and Evaluation
tests for 5th-grade pupils 364
National Educational Panel Study (NEPS) 82, 89
National Education Longitudinal Study (NELS) 1988 253
national learning assessment (INVALSI, 2013–14) 310
National Pupil Database (NPD)
state-financed schools 219
National School Assessment Programme (INVALSI-SMV) 309
native language testing (Arabic or Hebrew)
English, mathematics, science 364
negative and positive associations, Australia 280
neighbourhood conditions 62
multinomial logistic regression models
non-public schools, Hungarian school system 131
predicting transition to different types of secondary education 351
non-Roma students 142
multinomial logistic regressions 220
Nordic countries
socially inclusive education systems 63
less studied forms of differentiation 391
Nordic inclusive model
Denmark, Finland, Sweden 19, 390–92
odds ratio for early school leaver
parental education and relevant control variables 278
influence for track choices, further education 13–14
one-year pre-school class 199
optional subjects 221
United Kingdom 218
ordinary (common schools) 327
ordinary-least-squares (OLS), regression analysis 274
ordinary vs top-tier academic track 328
Organisation for Economic Co-operation and Development (OECD) 272, 380
organization of educational institutions 27
outcome variables 272–3
VET, ATAR, Australia 273
outflow mobility percentages from 10th- to 12th-grade track 369
parental background, ability 255–9
influence for track choices, further education 13–14
mobility between different secondary school tracks by 5th-grade track attendance 86, 156, 185, scholastic ability 157 socio-economic school composition 159–60 parental education degrees 216, 221 educational attainment of students 256 highest level of educational attainment differentiations 203 influence on chances of attending *Gymnasium*, Germany 84 level, role 217 the Netherlands 160 on optional subject choices 228 on type of school effects in Australia 280–81 role English Baccalaureate subjects 216 intergenerational transmission 106 in US effects on education attainment 252–3 parental influence on children’s school outcomes Germany 102 on optional choices 223 parental influence on track choice limit in Netherlands 149–51 parental social assistance, Finland 182 parental social class, child’s academic ability 269 parental tertiary or primary education degree 152 Pareto optimal policy 143 peer-group effects reinforcement of background differentials 17 percentage distribution of students in different tracks 143 percentage of students on career events 141 percentages in examination tracks Israel, matriculation exams 366 performance in the USE social background and track choice 337 perpetuation of social advantage, Russia 338–9 PIAAC see Programme for the International Assessment of Adult Competencies PIRLS see Progress in International Reading Literacy Study placement in high-ability groups, Sweden and US 382 polytechnics Finland 385 reduction of social inequalities 193 positive SES effect on reading, not on maths 160 post-Communist transition, Hungary 130 Post Leaving Certificate courses, Ireland 235–6 post-secondary education transitions 353 post-Soviet period in Estonia decrease of intergenerational social mobility 343 post-stratification TIMSS weights 331 post-tracking outcomes 330 states 327 choice between three 328 tracking returns 327, 335–8 practical education (PO) secondary education on elementary school level 150 predicted probability for transition to higher education 335 by social origin and type of secondary education, Estonia 356 prediction of post-secondary education transitions 354 pre-school at four or five in Netherlands 149 pre-tracking allocation 327, 331–2 by competences and social background 332 pre-vocational track (vmbo) 150 primary and lower secondary education Denmark, ages 6–16 199 ‘primary’ and ‘secondary’ effects of social background Russia 323 primary effect of social origin 13, 395–6 primary school to young adulthood 45
primary vocational education
training for skilled workers 324
prior academic achievement (TIMSS)
math score
Russia 331
prior performance
link between social origin and subject
choice 241
Scotland 239
private education in UK, long tradition
214
private schools
academically selective in UK 213
and public schools, Scotland 234
choice, France 288, 292
negative effect in university entry
299
types of 17
private tutoring, advantaged families 16
probability of dropout
downward track mobility 313
professional education
primary vocational, secondary
vocational, higher education, Russia 324
Professional education and Training
(PET) sector 113
high SES individuals 123
stronger inequalities 115
Programme for International Student
Assessment 272
2006 survey on ability grouping 135
data 6–7, 18, 37, 38
evaluation in 2000
Finland as world leader in educational
outcomes at 15, 181
findings 69
reading assessment 67
sample by age 66
sample by grade 66
socially inclusive education systems
74
Programme for the International
Assessment of Adult Competencies
(PIAAC) 46
programme on classical Gymnasium 200
programmes, academically oriented
humanities, natural sciences, social
sciences 200
Progress in International Reading
Literacy Study (PIRLS) 45
skills relevant for (future) everyday
life 49
pseudo-vocational vs true secondary
vocational track 328
public and non-public education
differences in Hungary 132, 145
public education system 138
public schools in England 4
public universities in Italy 307
pupils’
achievement, pre-sorting measures 379
GPA at end of ninth school year
performance levels 203
pre-tracking performance in terms of
their GPA 202
social background, detailed
information 379
social origin
parents’ highest educational level on
International Standard
Classification of Education
(ISCED) scale 202
sorting 392
‘quantitative’ and ‘qualitative’ aspect,
Hungary 130
reading
competencies, measurement
countries involved, eleven 48
PIRLS, PISA, PIAAC 48
comprehension, use of language, Italy
315
literacy 56–7
and mathematics
competencies
in early life, across countries 53
high- and low-social background
54
development
regression models 52–3
performance changes
PISA 2000–12 70
z scores for 51
registered language, ethnic difference
190
Finnish, Swedish and other 186
relative risk aversion, US 264–5
relative risk ratios
Catholic independent or government school 275
of multinomial logistic regressions
for mobility to the academic track
by original placement in 10th grade 370, 371
of multinomial regression
of 10th grade track placement 368
university qualification VET qualification 279
religious and philosophical backgrounds
schools in the Netherlands 150
research questions
common set 8
Denmark 201–3
design 329–31
England, UK 218
Estonia, social background effects 346
Finland 183–5
Switzerland, secondary, tertiary education 113–14
Roma students, low-status population 142
Rudolf Steiner schools 82
Russell Group dossier of eight subjects 235
Russian educational system 325
reproduction of social inequality 323–40
Russian Panel Study of Trajectories in Education and Careers (TYrEC) 329
Russia, prestigious top-tier schools 394
scholarships to high-achieving children
Australia 270
schooling environments
vertical and horizontal dimension 381
school(s) based track mobility 98
characteristics
effects of achievement levels 154
Scotland and Ireland 238–9
choices 14, 63, 136
on basis of residential area 14
race or class composition 14
denominational, in Hungary, 2012 131
educationally challenged
educational outcomes
social mobility in England 215–6
education system
professional education system,
Russia 324
Files, Israel
annual information on all schools 364
-grade differences, across countries 49, 51
-leavers, early
parental education association 281
-leaving age, 14, now 16
Italy upper second and tertiary 306–7
level heterogeneity 6
life involvement, advantaged families 16
marks, track allocation 14
performance 192
secondary education 299
primary education, France 290
tertiary education 189
private-dependent and public in
Netherlands 150
privately funded ‘public’ schools in
UK 214
of origin, Russia 331
quality 64–5
recommendation
and aspiration of parents, primary level 100
Russia, (complete) general education 324
sectors, Jewish and Arab, in Israel 361
segregation changes
reading test scores in PISA schools 71
state-financed in UK 213
study on the Netherlands COOL data 151
subject choices
and social class, Scotland and Ireland 233–47
system choice and differentiation
Russian educational system 326–7
system in Hungary, school-level autonomy 130
systems
effect on education level 104
institutional differences 65
Israel, public, Jewish-religious,
Models of secondary education and social inequality

independent 361
system transformation, Israel
several reforms, 1970s 363
track in 10th grade 310
tracking at age 12, the Netherlands 387
type, and curricular differentiation
promotion of social mobility 213
types, Russia, educational inequalities 323
‘upgrading’ 332
Zone d’Education Prioritaire (ZEP) France 290
Scotland
and Ireland differences 236
post-compulsory schooling
subject-specific Highers, exams 234
Scotland, secondary education 234
Scottish and Irish education systems 234–6
Scottish School Leaver Surveys 237–8
secondary education 3, 4
Arab schools, academic and
vocational/technological 373
arrangements 380
expansion, Estonia 344
German tripartite system 386
inequalities, how correctable 396
in Germany, highly stratified 79–81
in the US 250
Ireland, two phases 235
Israel, four clusters of educational
tracks 364
placement 384–6
Switzerland, differentiation in 111–27
tracks, admission into 156
understanding institutional
arrangements 379–81
secondary education
by birth cohort
transition to upper secondary school 349
in Australia
Catholic, independent government
schools 269–72
lower and upper 10
models
and social inequality, international
comparison 377–98
lower and upper secondary
schooling 111–12
secondary effects, declining 175
secondary general education, Russia
flexible, and to higher education 326
secondary schooling, lower, middle and
upper 80
secondary school(s)
differentiation
inequality of educational
opportunity in Germany 79–90
in United States, ‘high school’ 3
models, pluralism of 381
qualifications, upgrading 88, 89
three kinds, Ireland 235
students
Programme for International
Student Assessment (PISA) 46
systems 3–19
track, lower 112
tracks, three
movement up or down between 81
secondary track allocation
determinants, Switzerland 114–15
secondary vocational education
technical institutes and colleges 325–6
second-chance education, having left
school 98
second change, lack of, Hungary 145
second education, trajectories,
Netherlands 154–60
selection procedure in Russian schools 327
self-selection of teachers, for higher
student status 135
SES see socio-economic status
sex coding 273
short-term and long-term outcomes in
education 8
single parenthood 62
social advantage transmission, Russia 323
social and academic backgrounds effects
on student’s higher education, France 300
social background 16
allocation to educational streams 12–13
and educational attainment 10
and enrolment 395
and subject choice 393
and upper secondary school track (Gymnasium) 83 
at different ages 53–5 
compensatory effect 224 
Differentials 382–3 
educational inequalities 
Italy upper second and tertiary 306 
effect 9 393 
in PISA, stronger than 
comprehensive 65 
on early subject choice 213 
Switzerland 115 
Sweden 175 
UK role in transition to A-level at age 16 218 
higher association with higher 
competencies 331 
highest educational level of parents 331 
importance 
for track allocation, Switzerland 114 
influence on post-tracking returns 337 
on optional subject choice 221 
role 57, 317 
focus, parental education 386 
Sweden 171 
social-democratic welfare state 
Denmark, Finland, Sweden 198 
social gradients 172 
for highest level of job training 103, 104 
strong, Finland 190 
social inclusiveness increase of education systems 61 
social inequalities 377 
at allocation of secondary education 395–6 
composition of student body 94–5 
comprehensive school systems, 
Australia 269–82 
Germany 80, 89 
increased level in Estonia 343 
in education 393 
Italy 305–19 
Russia, reinforcement 323, 326–7 
Scotland and Ireland 233, 247 
in secondary education 382–6 
in student sorting 382 
students, French school system 301 
and subject choices 237 
trade-off 55 
social origin 
of children (School SES) 32–3 
difference 192–3 
Finland 181 184 
differentiating power on educational 
pathway since 1990s 353 
differentials, wider in Italy than other 
EU countries 306, 317 
effect, Germany, Hungary, the 
Netherlands, Switzerland 79 
effect of 171 
important effect, Israel 371 
stronger 34–5 
gradient, strong in access to university 188 
impact in secondary schooling careers 82 
importance, US, prior school success 264 
inequalities 184–5 
in Italy 305 
of pupils 31, 203 
(SchoolSES) 36 
secondary effects 13 
of students, quality of school, UK 218 
social origin and subject choice 
Scotland and Ireland 239–41 
stronger in Scotland than Ireland 246 
social origin (SES) role 
and educational achievement, 
Germany 79 
general conditions for achievement 36 
for independent schools, England 228 
positive effects 37 
social segregation 317 
decreasing 72 
of schools, in equality and excellence 71 
social selection 
in formal and informal selection in 
Sweden 165–79 
social selectivity, Estonia 357 
social status for school placements 145 
social stratification 
of motivation behind student choices 216 
societal characteristics, ethnic diversity 65 
socioeconomic inequality 65
socio-economic and cultural development 45
socio-economic background separation of students 61–2
socio-economic gradient, small in Italy 306
socio-economic profiles of students 367
socio-economic segregation high in United States 63–4
socio-economic status (SES) 18, 215
Australia 271
children, Switzerland 117
effects on elementary school exit test 153
elementary school teacher recommendation 155
Exit Test Score 152–4
index (SES) 135–6
larger role for special schools 122
Netherlands 160
weak on tertiary enrolment 126
pre-tracking, the Netherlands 151–4
students 115
teacher recommendation 154
Soviet period controlled access to tertiary education, Estonia 353
inequality in transition to secondary education 357
‘Soviet-type’ tracking at age of 14, 133
special needs schools, exclusion 82
special schools (SS) 122
Special Tertiary Admissions Test, Australia 281
stability or mobility in secondary schools 8
Standard Assessment Tests (SATs), Key Stage (KS) 219
standardization 326
increase, 1990s ‘national exams’, Estonia 345
Starting Cohort 6 of NEPS persons from mid-1940s to mid-1980s 83
State Final Attestation (SFA), Russia 324
Statistics Denmark 198
Statistics Finland, register data 185
Statistics Sweden, register data 170
status-segregated schools, Hungary 145
stratification in Denmark 198
streaming, in US 251
student achievement tests TIMSS and PIRLS and PISA 47
student(s) achievement in primary school 46
in secondary school 46
allocation to secondary education tracks 348–52
body composition background, ethnicity, gender, ability 5
distribution basic characteristics across school types 137
File, Israel
Ministry of Education data on students’ backgrounds 364
from different socio-economic backgrounds no harm to upper-class children 74
initial ability, prior school performance 253
mobility between schools 15
social background subjects to A-level, choice 218
sorting, for secondary education 8
test scores, PISA reading assessment 67
underprivileged school enrolment, France 288
with Maghreb origins high probability for university 300, 301
subject choice in Ireland English, Math and Irish compulsory 236
in Scotland no formal constraints 236
mediating role for higher education entry 241–6
for girls and for boys upper secondary schools 243–6
for Scotland and Ireland 244, 245
role of 243
in equality of opportunity 216
mediators of social inequalities in
higher education 236–7
and schools, role of, England 213
subjects, ‘core’, upper secondary
education 238
subjects, ‘other’, upper secondary
education 238
subject-specific ability grouped teaching
Math, English, and Swedish 165
subject-specific ability grouping
how common 177
questions on Math, English language,
and Swedish language 170
subject-specificity ability grouping 167–8
Survey on Youth Conditions 2000
(IYARD) 312
Survey of High School Graduates, ISTAT
309, 313
Italy 309
‘Survey on the Youth Condition’
IARD Institute, Italy 309
Swedish educational system
formal tracking in upper secondary
education 166–7
minor effects on social selection 178
transition from compulsory education
to upper secondary 165
Swedish National Agency for Education
(2009) 168
Swiss educational system
highly federalist 111
strong stratification 111
track allocation to lower secondary
schooling 126
Swiss Survey of Children and Youth
COCON
115–16
Swiss upper secondary education 112
teacher(s)
characteristics
in different classes, Hungary 132
efforts, quality of schools 36
expectations 18, 64
recommendations
binding, non-binding, Germany 80
in which Federal States 82–4
role 112
for German secondary schools 80
track allocation 14
sorting, positive self-selection 17–18
technical and vocational schools
inhibition of opportunity 373
Israeli educational system 367
versus academic, in Italy 305
technological development 3
technological education tracks, France
287
technological institutes, France 385
technological or vocational tracking
dropout status more likely 371
tertiary education 9, 151, 184, 185
enrolment 122–6
Finland 181
liberalization, Estonia 353
and polytechnics 188
professional education and training
(PET) sector 113
Swiss educational system 113, 126
university sector 113
tertiary effects
teaching staff’s socially biased
expectations 30
tertiary enrolment, secondary school
allocations 297–8
tertiary level schools
health, education, social work, IT 113
tertiary track allocation determinants,
Switzerland 115
test score comparability methodological
challenge 49
test scores, track allocation 14
theoretical expectations 33–5
theoretical predictions of the
Model of Ability Tracking (MoAbiT)
34
TIMSS see Trends in International and
Science Study
top-tier (lyceums and gymnasiums) 327
track changes Italy, downward mobility
314
track changing 15
track choice
Russia 333–5
predicted probabilities
school of origin effect 336
tracking 6, 199
  country-fixed-effects models 68
  and de-tracking, education reforms 66
curricular, US
  middle and secondary schools 250
early, and competition 129–45
eyearly and vocational 142
formal external 46
Hungary
  between public and non-public
  schools 133
indicators
  outcomes in 8th grade 139
  outcomes in 10th grade 140
informal 171–3
  in compulsory education, Sweden
  167–8
  external, major influence 301
in the Netherlands
  ability selection 149–61
  social reproduction 149–61
into Hauptschule, Realschule,
  Gymnasium 95–6
into lower secondary education
  Swiss educational system 112
into types of secondary education
  Estonia 344, 353–6
model in the Netherlands
  higher education backgrounds,
scores 389
rigid systems
  Germany or Switzerland, flexibility
  380
streaming, ability grouping 197
  systems, German
  influence on social equality 94
  systems, internal and external 105
track mobility 98, 150, 290
track placement
  based on prior performance 149
  in upper secondary education 309–12
tracks, five, Russia
  top-tier academic, ordinary academic,
  pseudo-vocational, true secondary
  vocational, primary vocational
  329–30
track switching, Germany 388
track to universities, the Netherlands 150
  traditional tripartite model
classic, modern, technical secondary
schools 4
  Transitions from Education to
  Employment (TREE) survey 122
  Swiss PISA study 116
  transition to upper secondary school 318
  Italy 305
transmission of parental education status
106
Trends in International and Science
  Study (TIMSS) 45–6
  skills taught in school 49
tripartite system 4
  Switzerland 386
tuition fee for vocational tracks 362
tuition fee system, Israel
  grading to parents’ income 362
two-track system, in Nordic countries
  390
type of school attended
  Gesamtschule, 6th grade 98, 99
unemployment 143
Unified State Examination (USE) Russia
  like American SAT or German Abitur
  326
United Kingdom (UK)
  educational inequalities, maintenance
  213
Universities and Colleges Admissions
  Service (UCAS) 234, 238
universities of applied sciences (UAS)
  stronger inequalities 115
  Switzerland 385
  vocationally oriented 113
universities of teacher education (UTA)
  stronger inequalities 115
university
  -educated parents, effects of 280
enrolment gap 315
entrance direct or via polytechnics 190
entrance predictions 315
of applied sciences (UAS)
  high SES individuals 123
of teacher education (UTE)
  high SES individuals 123
reform, Bologna process
  socio-economic differentials in
  enrolment 314
sector expansion, Finland 183
tracks, Australia 270
upgrading in upper secondary education 202
rare in Denmark 208
upper secondary diplomas
France 291
for higher education entry, Italy 307
individual characteristics 295
upper secondary education 132, 192
achievement 315–17
Italy, academic, technical vocational 307
non-completion 203–4
Danish study 202
schools for vocational training 113
Sweden, vocational or academic 166–7
upgrading, results, Denmark 206
preparation for tertiary education 199–201
upper secondary school(s)
dropout 312
general and vocational 182
track (Gymnasium) 82, 275
upper secondary track allocation
VET (low/medium requirements) 119–22
upward mobility
with highly educated parents, Russia 384
upward mobility risk set 83
upward or downward mobility and impact of parental education 87
United States (US) educational system 249
secondary schooling
internal differentiation 250–51
variables, dependent
mathematics and reading literacy 50
variables in analysis in each dataset
Italy upper second and tertiary 308
variables, independent
background information 365
variables, pupils’ sex, Denmark 202
‘verbal competence’ 97
vocational education and training (VET) 270
Finland, reform, 1980s and 1990s 182
Israel 362, 367
Swiss educational system 112
VET+ and VET- 116, 119, 122
VET modules 271
VET programmes, Australia 271
VET qualification completion 280
vocational and technical subjects, optional 219
vocationally oriented programmes, Denmark 200
vocational name change
to technological education 363
vocational or university degree highest reached by social background 101, 102
vocational qualifications, for labour market, Denmark 201
vocational school 112–13
training for industry 344–5
vocational subjects 228
vocational-technological education, reform in early 1990s
Israeli educational system 363
vocational to technological track upgrading in France 297
vocational track
Certificat d’Aptitude Professionnelle (CAP) 288
vocational tracking 145
mechanism 136
upper secondary level, age 14, 132
vocational track placement
negative effects for higher education 363
vocational track to technological baccalaureate
France 298
vocational training 136, 142
‘dual system’ Germany 4
‘meant’ for boys 350
popularity among girls 350
vocational upper secondary education for labour market and careers 200–201
Voluntary-Aided/Controlled school
England 220
wage levels 143
within-school separation of students 145
within-school mobility 16
work at firm 112
working- and middle-class student reasons for choices 236–7
years of compulsory schooling 26
Zone d’éducation prioritaire (ZEP) 290, 291